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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/803,675	03/18/2004	Tony Chau	CA920030070US1	5939
35525 7590 07/24/2008 IBM CORP (YA) C/O YEE & ASSOCIATES PC P.O. BOX 802333 DALLAS, TX 75380				
EXAMINER SMITH, GARRETT A				
ART UNIT 2168		PAPER NUMBER		
NOTIFICATION DATE 07/24/2008		DELIVERY MODE ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ptonotifs@yeciipaw.com

## Office Action Summary

**Application No.**

10/803,675

**Applicant(s)**

CHAU ET AL.

**Examiner**

Garrett Smith

**Art Unit**

2168

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 April 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 7-9 and 21-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7-9 and 21-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

### DETAILED ACTION

1. This Office action is regarding Applicant's response filed 10 April 2008 to a prior Office action. Claims 7 – 9 and 21 – 27 are pending. Claims 1 – 5, 10 – 15 and 17 – 20 and 29 are canceled. Claims 7 – 9, 21 – 23 and 25 have been amended.
2. This Office Action is the **Third Action – Final Rejection**.

### *Response to Arguments*

#### **Examiner's Remarks**

3. Applicant states, on page 8 of the response filed 10 April 2008, "Applicants are not conceding in this application that these claims are not patentable over the art cited by the Examiner, as the present claim amendments and cancellations are only for facilitating expeditious prosecution of the **allowable subject matter noted by the examiner**" (emphasis added). As the Examiner would like to be clear, the Examiner did not note any allowable subject matter in the previous Office Action.

#### **Claim Objections**

4. The Examiner notes the claim objection should have been for claim 9. However, as Applicant has corrected the issue with claim 9, the claim 7 objection is withdrawn.

#### **35 USC § 101**

5. Applicant's arguments (pages 8 – 9) and amendments, filed 10 April 2008, regarding the rejection under 35 USC § 101 of claims 7 – 9 and 17 – 28 have been fully

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considered and are persuasive. Claims 17 – 20 and 28 have been canceled. In regard to claims 7 and 23, these claims now appear to recite a useful, concrete and tangible result. For these reasons, the rejection under 35 USC § 101 of claims 7 – 9 and 17 – 28 is **withdrawn**.

**35 USC § 112, First Paragraph**

6. Applicant's arguments (page 8) and amendments, filed 10 April 2008, regarding the rejection under 35 USC § 112, First Paragraph of claim 29 have been fully considered and are persuasive. Claim 29 has been canceled. For these reasons, the rejection under 35 USC § 35 USC § 112, First Paragraph of claim 29 is **withdrawn**.

**35 USC § 103(a)**

7. Applicant's arguments (page 9 – 11) and amendments, filed 10 April 2008, regarding the rejection under 35 USC § 103(a) of claim 7 – 9 and 21 – 27 have been fully considered and they are **persuasive-in-part**. Claims 1 – 3, 10 – 13, 17 – 19 and 29 are canceled.

In regard to claim 7, Applicant argues,

The Examiner makes no assertion or allegation that any of the cited references teach or otherwise suggest a set of features that are identifiable in graphical representations, or that each feature in the set of features has an associated pattern mapping. Thus, it is urged that the Examiner has failed to properly establish a prima facie showing of obviousness with such generalized, cursory statement the pattern mappings are used to create the RR diagram, as such generalized assertion does not establish a teaching or suggestion with respect to the particular that each of the graphical representation features has an associated pattern mapping.

The Examiner must first note that Applicant, through the claims of the Application, is attempting to claim the invention in the broadest possible terms, as allowed by the statutes. Therefore, the Examiner must give pending claims "their broadest reasonable interpretation consistent with the specification". *Phillips v. AWH Corp.*, 415 F.3d 1303, 75 USPQ2d 1321 (Fed. Cir. 2005) (MPEP §2111). The Examiner has provided an as detailed an explanation of the reference as required by the claims. The claim limitation Applicant is referring, it is a very broad recitation. Further, Applicant has provide no rational or explanation as to why Brisson fails to teach this limitation. The Examiner has also provided detailed arguments in the Office Action mailed 10 January 2008 (see page 5 and 6; these pages provide arguments, specifically the first full paragraph on page 6). The Examiner has explained how Brisson "uses" the pattern mappings. The term "applying" is given its broadest reasonable interpretation which is "using". Applicant's claims broadly state that the generation is done by "applying pattern mappings" without putting in claims exactly how this is achieved. Applicant may wish to further define what exactly this "applying" entails. As for the arguments regarding "graphical representation" versus "text-based representation", all text displayed on computer is always graphical (i.e. a MS DOS command prompt is "graphical"). Therefore, Applicant arguments regarding this are unpersuasive.

In regard to claim 8, Applicant argues the amendment to including "at least five" in the claim. The Examiner notes that the interpretation of claim now requires five feature pairs but each of the five feature pairs can be the same type of feature pair. This is simple repetition and is well within the knowledge and capability of a person of

ordinary skill in the art. However, the Examiner notes that Applicant may have been intending to have the claim recite “the set of identifiable features and associated pattern mappings, comprises feature and pattern mapping pairs selected from each of at least five of the following sets”. This may require five of the types of pairs to be present.

In regard to claim 21, Applicant’s arguments are persuasive in that “wherein at least one of the features is fault handing [sic] and the associated pattern mapping for the fault handling comprises a catch structure specifying fault name and container” does not appear to be found in any of the applied references. However, “throw-catch” statements and their uses are very well known in the art. Therefore, the Examiner takes Official Notice that “catch” statements (and related fault handling) is well known by a person of ordinary skill in art. A rejection as to such is provided below.

For these reasons, the rejection under 35 USC § 103(a) of claims 7 – 9 and 23 – 27 is **maintained**. The rejection under 35 USC § 103(a) of claim 21 and 22 is **withdrawn**.

### ***Claim Objections***

8. Claims 21 and 25 objected to because of the following informalities: In claim 21, “handing” should be “handling”. In claim 25, item xi(b), “<reply” should be “<reply>”. Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claims **7, 8 and 23 – 25** are rejected under 35 U.S.C. 103(a) as being unpatentable over Brisson (US Patent 5,678,052; patented 14 October 1997) in view of Lämmel et al ("Semi-automatic Grammar Recovery; available July 2001) and further in view of Collier et al (US Patent 5,815,152).

12. In regard to **claim 7**, Brisson teaches methods and systems for converting a Backus-Naur Form (BNF) grammar (structural text-based) into a compressed rail-road (RR) diagram (see Abstract, as well as Figure 5 for the example of a BNF and Figure 6a, 6b, 6c for the RR diagram of that BNF). Brisson discloses using pattern mappings to create the RR diagram (see figure 3).

While Brisson does not directly disclose creating a BNF from a RR diagram, Lämmel et al discusses in section 3.1 and 3.2 extraction of whole syntax (i.e. railroad) diagrams from IBM's VS COBOL II manual and the parsing of the diagrams into BNF code. It would have been obvious to a person of ordinary skill at the time of invention to use a the parser of Lämmel et al with the system of Brisson because it provides for a user to check and verify the validity of a provide BNF or RR diagram. Further, it allows a user to quickly convert a RR diagram into a machine readable form for processing by a computer without having to manually convert it (section 3.1 of Lämmel et al).

Brisson does not explicitly teach that the representations can be business processes. Collier et al does teach that graphical representation of business processes can be created through an interface (see figure 5). It would have been obvious to a person of ordinary skill at the time of invention to use the conversion methods and systems of Brisson and Lämmel et al with the graphical business process representations of Collier et al because it would resulted in the predictable result of converting text-based business processes into graphical representations of the business processes and furthermore would allow a user to have a multi-format business process that could be used elsewhere.

13. In regard to **claim 8**, Brisson, as mentioned above, teaches pattern mapping for converting between a BNF and a RR diagram (col 5, lines 44 – 60). Collier et al further teaches a system that allows a user to construct a business process with nodes that include conditionals, send/receive/response actions, and iterations (see figures 5, 8 and 11).



While Brisson does not directly disclose creating a BNF from a RR diagram, Lämmel et al discusses in section 3.1 and 3.2 extraction of whole syntax (i.e. railroad) diagrams from IBM's VS COBOL II manual and the parsing of the diagrams into BNF code. It would have been obvious to a person of ordinary skill at the time of invention to use a the parser of Lämmel et al with the system of Brisson because it provides for a user to check and verify the validity of a provide BNF or RR diagram. Further, it allows a user to quickly convert a RR diagram into a machine readable form for processing by a computer without having to manually convert it (section 3.1 of Lämmel et al).

Brisson does not explicitly teach that the representations can be business processes. Collier et al does teach that graphical representation of business processes can be created through an interface (see figure 5). It would have been obvious to a person of ordinary skill at the time of invention to use the conversion methods and systems of Brisson and Lämmel et al with the graphical business process representations of Collier et al because it would resulted in the predictable result of converting text-based business processes into graphical representations of the business processes and furthermore would allow a user to have a multi-format business process that could be used elsewhere.

14. In regard to **claim 23**, Brisson teaches methods and systems for converting a Backus-Naur Form (BNF) grammar (structural text-based) into a compressed rail-road (RR) diagram (see Abstract, as well as Figure 5 for the example of a BNF and Figure 6a, 6b, 6c for the RR diagram of that BNF). Brisson discloses using pattern mappings to create the RR diagram (see figure 3).

While Brisson does not directly disclose creating a BNF from a RR diagram, Lämmel et al discusses in section 3.1 and 3.2 extraction of whole syntax (i.e. railroad) diagrams from IBM's VS COBOL II manual and the parsing of the diagrams into BNF code. It would have been obvious to a person of ordinary skill at the time of invention to use a the parser of Lämmel et al with the system of Brisson because it provides for a user to check and verify the validity of a provide BNF or RR diagram. Further, it allows a user to quickly convert a RR diagram into a machine readable form for processing by a computer without having to manually convert it (section 3.1 of Lämmel et al).

Brisson does not explicitly teach that the representations can be business processes. Collier et al does teach that graphical representation of business processes can be created through an interface (see figure 5). It would have been obvious to a person of ordinary skill at the time of invention to use the conversion methods and systems of Brisson and Lämmel et al with the graphical business process representations of Collier et al because it would resulted in the predictable result of converting text-based business processes into graphical representations of the business processes and furthermore would allow a user to have a multi-format business process that could be used elsewhere.

15. In regard to **claim 24**, Collier et al further teaches a system that allows a user to construct a business process with nodes that include conditionals, send/receive/response actions, and iterations (see figures 5, 8 and 11).

While Brisson does not directly disclose creating a BNF from a RR diagram, Lämmel et al discusses in section 3.1 and 3.2 extraction of whole syntax (i.e. railroad)

diagrams from IBM's VS COBOL II manual and the parsing of the diagrams into BNF code. It would have been obvious to a person of ordinary skill at the time of invention to use a the parser of Lämmel et al with the system of Brisson because it provides for a user to check and verify the validity of a provide BNF or RR diagram. Further, it allows a user to quickly convert a RR diagram into a machine readable form for processing by a computer without having to manually convert it (section 3.1 of Lämmel et al).

Brisson does not explicitly teach that the representations can be business processes. Collier et al does teach that graphical representation of business processes can be created through an interface (see figure 5). It would have been obvious to a person of ordinary skill at the time of invention to use the conversion methods and systems of Brisson and Lämmel et al with the graphical business process representations of Collier et al because it would resulted in the predictable result of converting text-based business processes into graphical representations of the business processes and furthermore would allow a user to have a multi-format business process that could be used elsewhere.

16. In regard to **claim 25**, Brisson, as mentioned above, teaches pattern mapping for converting between a BNF and a RR diagram (col 5, lines 44 – 60). Collier et al further teaches a system that allows a user to construct a business process with nodes that include conditionals, send/receive/response actions, and iterations (see figures 5, 8 and 11).

While Brisson does not directly disclose creating a BNF from a RR diagram, Lämmel et al discusses in section 3.1 and 3.2 extraction of whole syntax (i.e. railroad)

diagrams from IBM's VS COBOL II manual and the parsing of the diagrams into BNF code. It would have been obvious to a person of ordinary skill at the time of invention to use a the parser of Lämmel et al with the system of Brisson because it provides for a user to check and verify the validity of a provide BNF or RR diagram. Further, it allows a user to quickly convert a RR diagram into a machine readable form for processing by a computer without having to manually convert it (section 3.1 of Lämmel et al).

Brisson does not explicitly teach that the representations can be business processes. Collier et al does teach that graphical representation of business processes can be created through an interface (see figure 5). It would have been obvious to a person of ordinary skill at the time of invention to use the conversion methods and systems of Brisson and Lämmel et al with the graphical business process representations of Collier et al because it would resulted in the predictable result of converting text-based business processes into graphical representations of the business processes and furthermore would allow a user to have a multi-format business process that could be used elsewhere.

17. Claims **21 and 22** are rejected under 35 U.S.C. 103(a) as being unpatentable over Brisson (US Patent 5,678,052; patented 14 October 1997) in view of Lämmel et al ("Semi-automatic Grammar Recovery; available July 2001), further in view of Collier et al (US Patent 5,815,152), and further in view of Official Notice.

18. In regard to **claim 21**, Brisson teaches methods and systems for converting a Backus-Naur Form (BNF) grammar (structural text-based) into a compressed rail-road

(RR) diagram (see Abstract, as well as Figure 5 for the example of a BNF and Figure 6a, 6b, 6c for the RR diagram of that BNF). Brisson discloses using pattern mappings to create the RR diagram (see figure 3).

While Brisson does not directly disclose creating a BNF from a RR diagram, Lämmel et al discusses in section 3.1 and 3.2 extraction of whole syntax (i.e. railroad) diagrams from IBM's VS COBOL II manual and the parsing of the diagrams into BNF code. It would have been obvious to a person of ordinary skill at the time of invention to use a the parser of Lämmel et al with the system of Brisson because it provides for a user to check and verify the validity of a provide BNF or RR diagram. Further, it allows a user to quickly convert a RR diagram into a machine readable form for processing by a computer without having to manually convert it (section 3.1 of Lämmel et al).

Brisson does not explicitly teach that the representations can be business processes. Collier et al does teach that graphical representation of business processes can be created through an interface (see figure 5). It would have been obvious to a person of ordinary skill at the time of invention to use the conversion methods and systems of Brisson and Lämmel et al with the graphical business process representations of Collier et al because it would resulted in the predictable result of converting text-based business processes into graphical representations of the business processes and furthermore would allow a user to have a multi-format business process that could be used elsewhere.

Brisson, Lämmel et al and Collier et al do not explicitly describe catch statements or fault handling. However, "throw-catch" statements and their uses are very well

known in the art. Therefore, the Examiner takes Official Notice that "catch" statements (and related fault handling) is well known by a person of ordinary skill in art. It would have been obvious to a person of ordinary skill in the art at the time of invention to use the combined system of Brisson, Lämmel et al and Collier et al with that of parsing a describing catch statements because catch statements (and the related throw statements) can be very complex and thus a way to parse these complex statements for easy understanding and debugging is beneficial.

19. In regard to **claim 22**, Brisson, as mentioned above, teaches pattern mapping for converting between a BNF and a RR diagram (col 5, lines 44 – 60). Collier et al further teaches a system that allows a user to construct a business process with nodes that include conditionals, send/receive/response actions, and iterations (see figures 5, 8 and 11).

While Brisson does not directly disclose creating a BNF from a RR diagram, Lämmel et al discusses in section 3.1 and 3.2 extraction of whole syntax (i.e. railroad) diagrams from IBM's VS COBOL II manual and the parsing of the diagrams into BNF code. It would have been obvious to a person of ordinary skill at the time of invention to use a the parser of Lämmel et al with the system of Brisson because it provides for a user to check and verify the validity of a provide BNF or RR diagram. Further, it allows a user to quickly convert a RR diagram into a machine readable form for processing by a computer without having to manually convert it (section 3.1 of Lämmel et al).

Brisson does not explicitly teach that the representations can be business processes. Collier et al does teach that graphical representation of business processes

can be created through an interface (see figure 5). It would have been obvious to a person of ordinary skill at the time of invention to use the conversion methods and systems of Brisson and Lämmel et al with the graphical business process representations of Collier et al because it would resulted in the predictable result of converting text-based business processes into graphical representations of the business processes and furthermore would allow a user to have a multi-format business process that could be used elsewhere.

20. **Claims 9, 26 and 27** are rejected under 35 U.S.C. 103(a) as being unpatentable over Brisson (US Patent 5,678,052; patented 14 October 1997) in view of Lämmel et al ("Semi-automatic Grammar Recovery; available July 2001) and Collier et al (US Patent 5,815,152) as applied above and in further view of Nemer (US PGPUB 2003/0110446, published 12 June 2003).

21. In regard to **claim 9**, Nemer teaches an object class and method for converting XML (which XPath is part of) to Java code and Java into XML code (see figure 3 and 4). It would have been obvious to a person of ordinary skill in the at the time of invention to use the conversion system of Nemer with the system of Brisson and Collier et al because it would have given the predictable result of converting a structured text based language (XML) into a code that can be used for graphical representations (Java).

22. In regard to **claim 26**, Nemer teaches an object class and method for converting XML (which XPath is part of) to Java code and Java into XML code (see figure 3 and 4). It would have been obvious to a person of ordinary skill in the at the time of invention to

use the conversion system of Nemer with the system of Brisson and Collier et al because it would have given the predictable result of converting a structured text based language (XML) into a code that can be used for graphical representations (Java).

23. In regard to **claim 27**, Nemer teaches an object class and method for converting XML (which XPath is part of) to Java code and Java into XML code (see figure 3 and 4). It would have been obvious to a person of ordinary skill in the at the time of invention to use the conversion system of Nemer with the system of Brisson and Collier et al because it would have given the predictable result of converting a structured text based language (XML) into a code that can be used for graphical representations (Java).



***Conclusion***

24. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Garrett Smith whose telephone number is (571) 270-1764. The examiner can normally be reached on Mon - Fri, 8:30 AM - 6:00 PM EST, Alt Fri Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim T. Vo can be reached on (571) 272-3642. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

July 21, 2008

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Garrett Smith  
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